

ATTACHMENT 1: **SUBSCRIBERSHIP INFORMATION
BY MASSACHUSETTS REGION**

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Boston Metro Region

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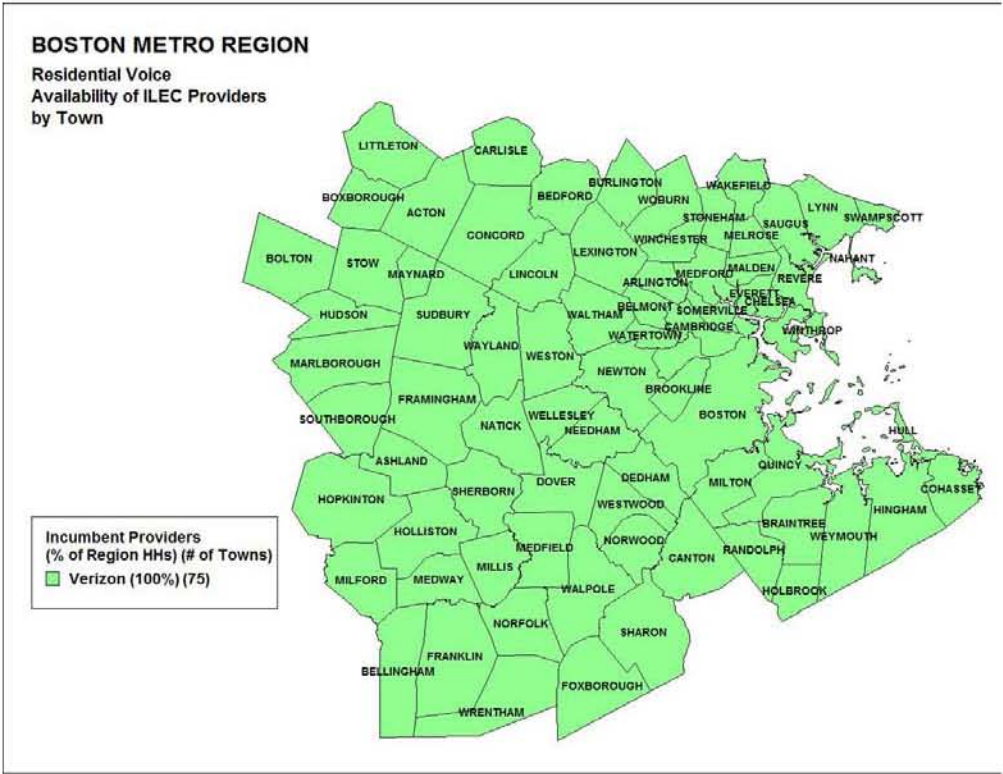


Figure BM-2: Availability of Cable Voice Providers, by Town, December 2008

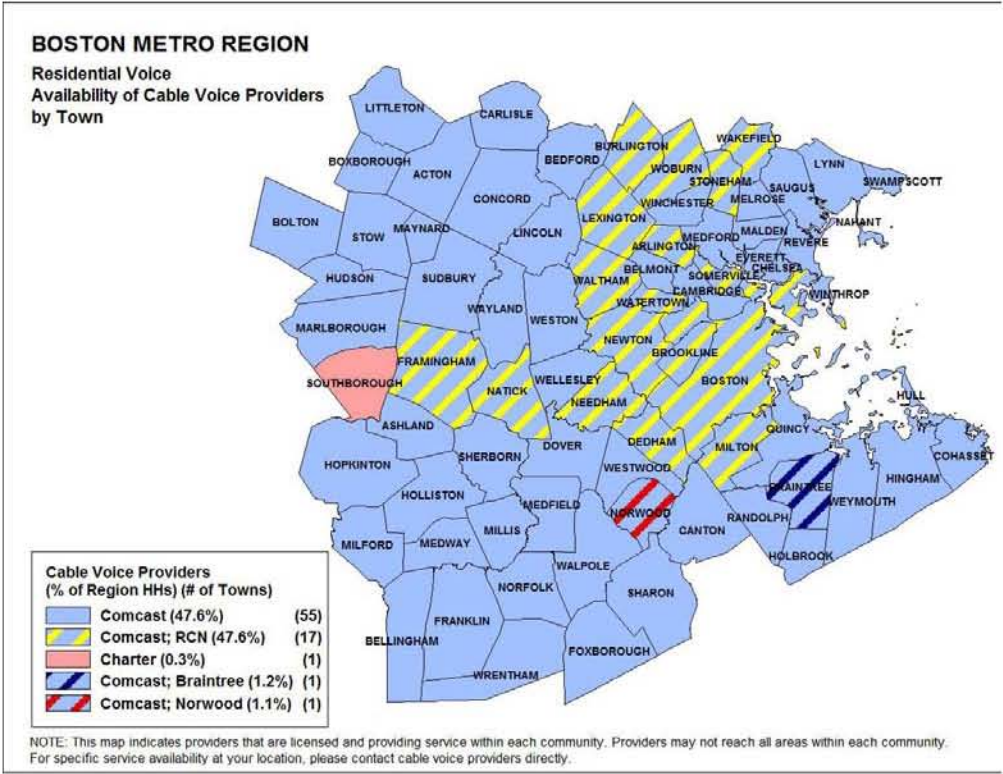
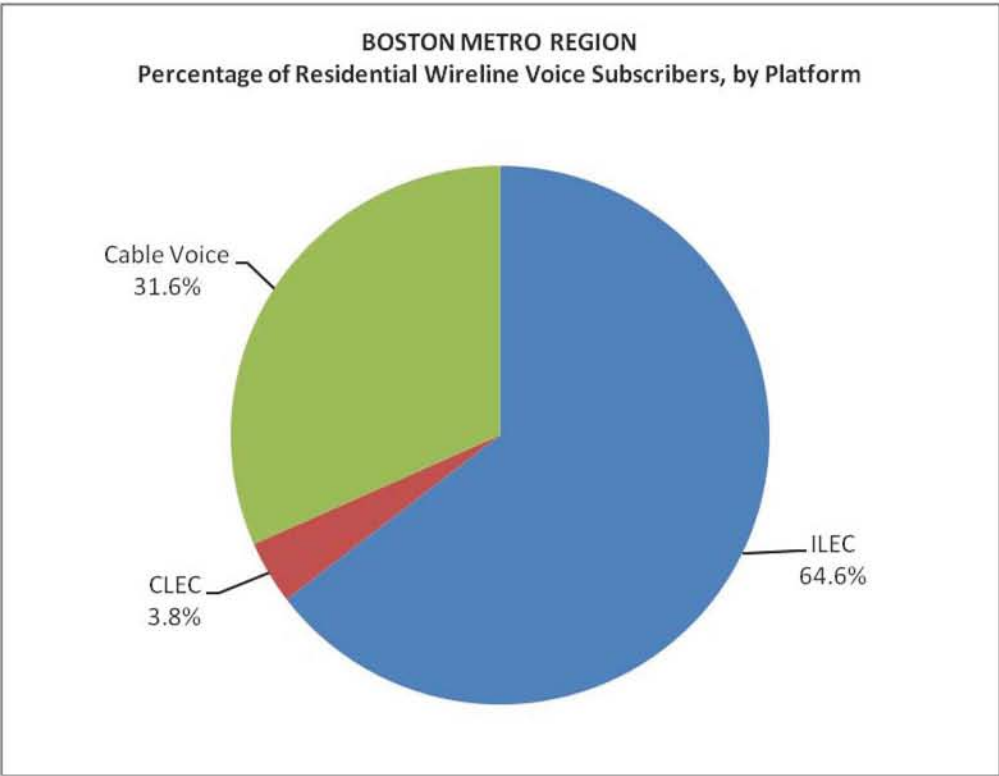


Figure BM-3: Market Shares for Residential Wireline Voice, by Platform, December 2007



II. Cable Video

Figure BM-4: Incumbent Cable Video Service Providers

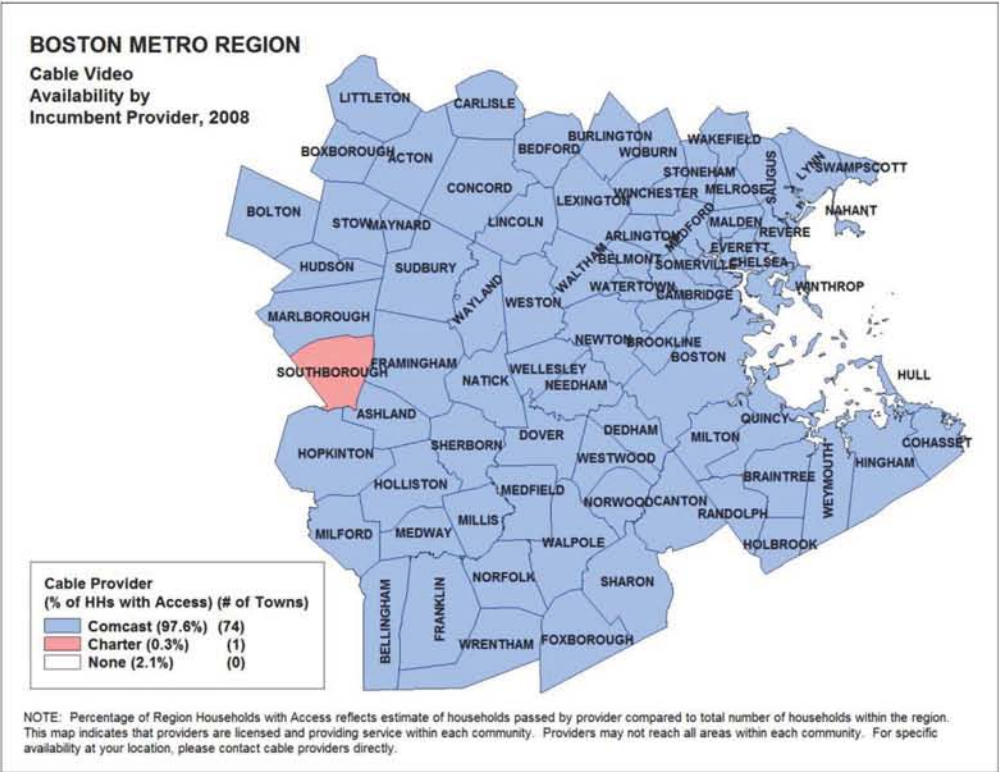


Figure BM-5: Percentage of Households Passed by the Incumbent Cable Provider, 2008

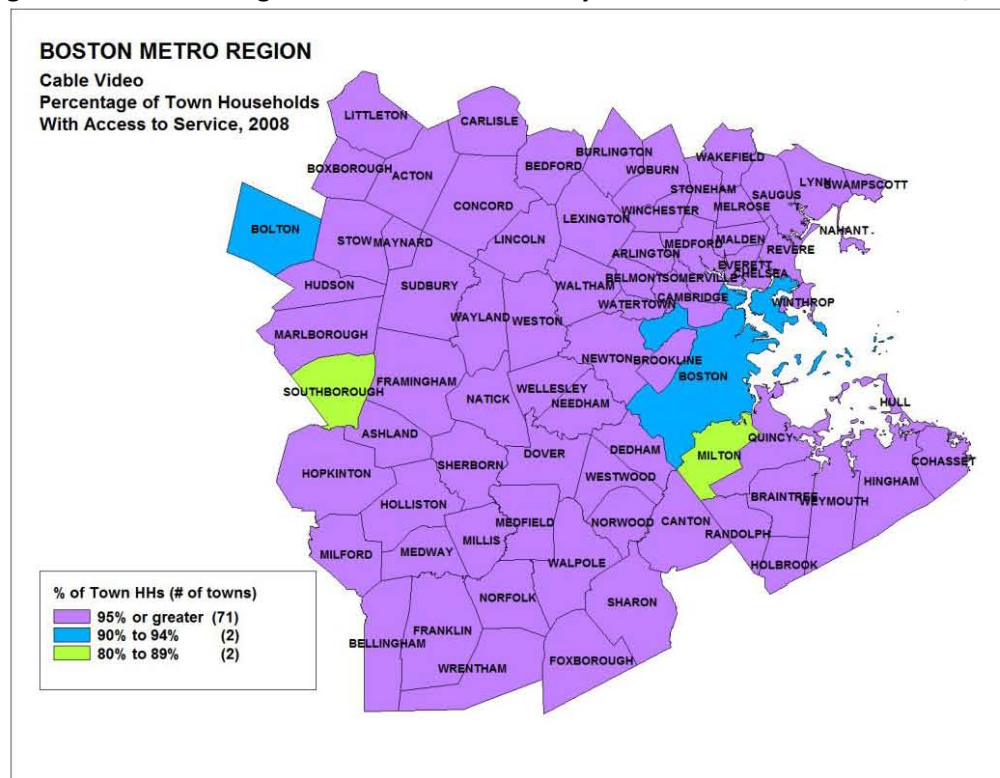
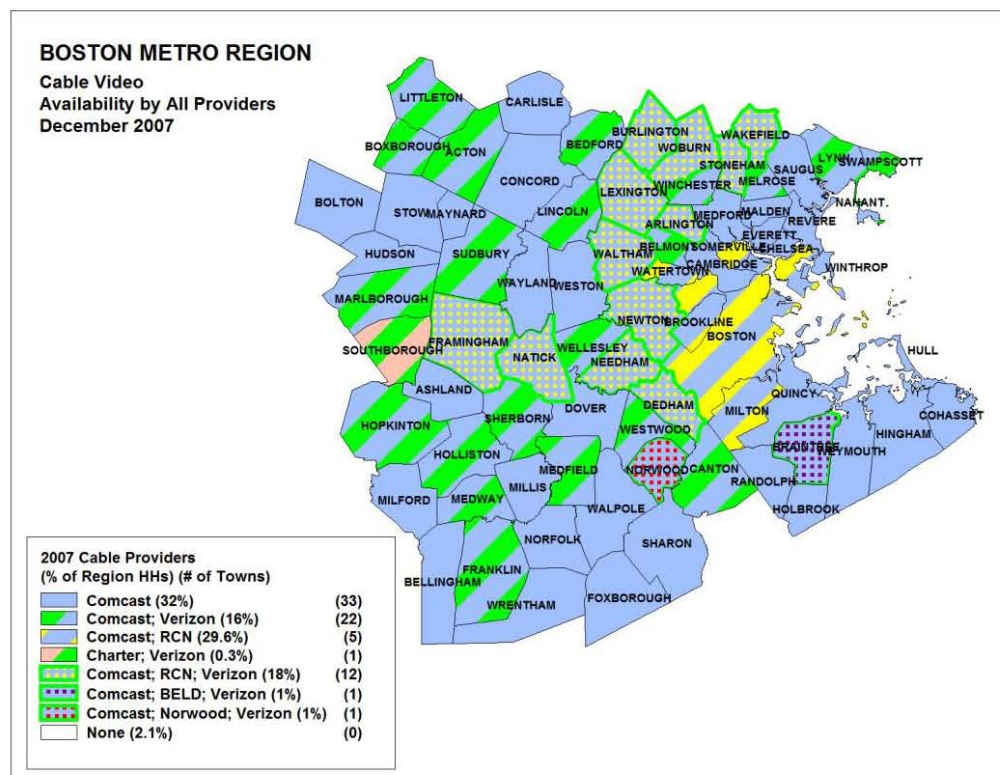


Figure BM-6: Active Cable Video Service Providers, December 2007



Northeast Region

I. Residential Voice

Figure NE-1: Availability of ILEC Voice Providers, by Town

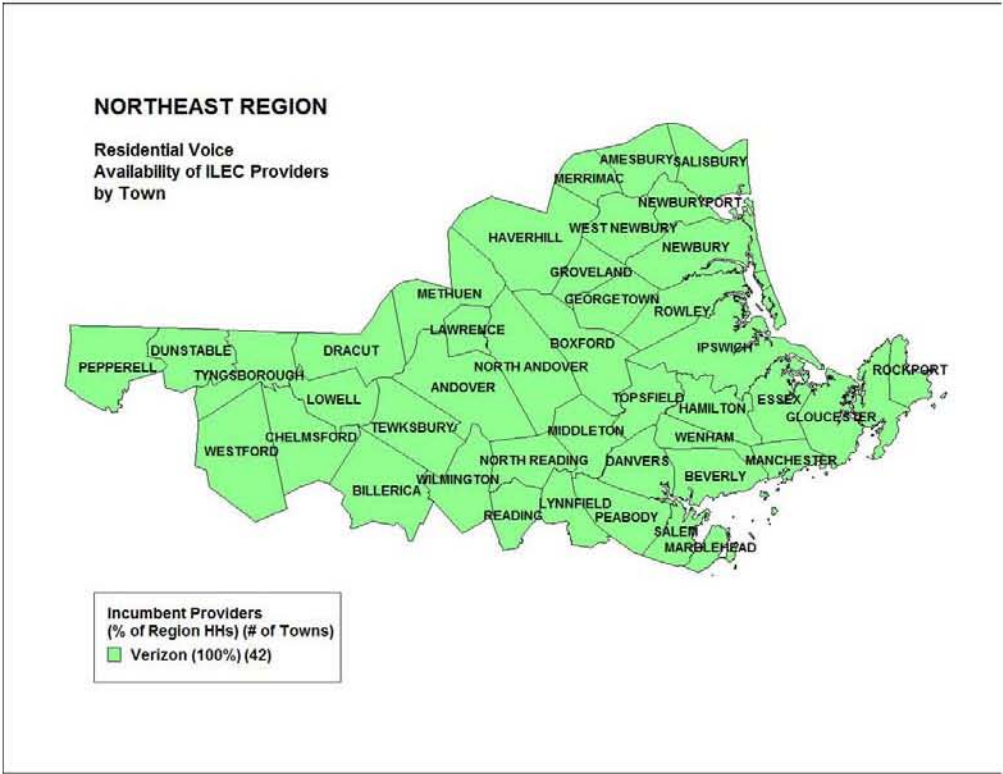


Figure NE-2: Availability of Cable Voice Providers, by Town, December 2008

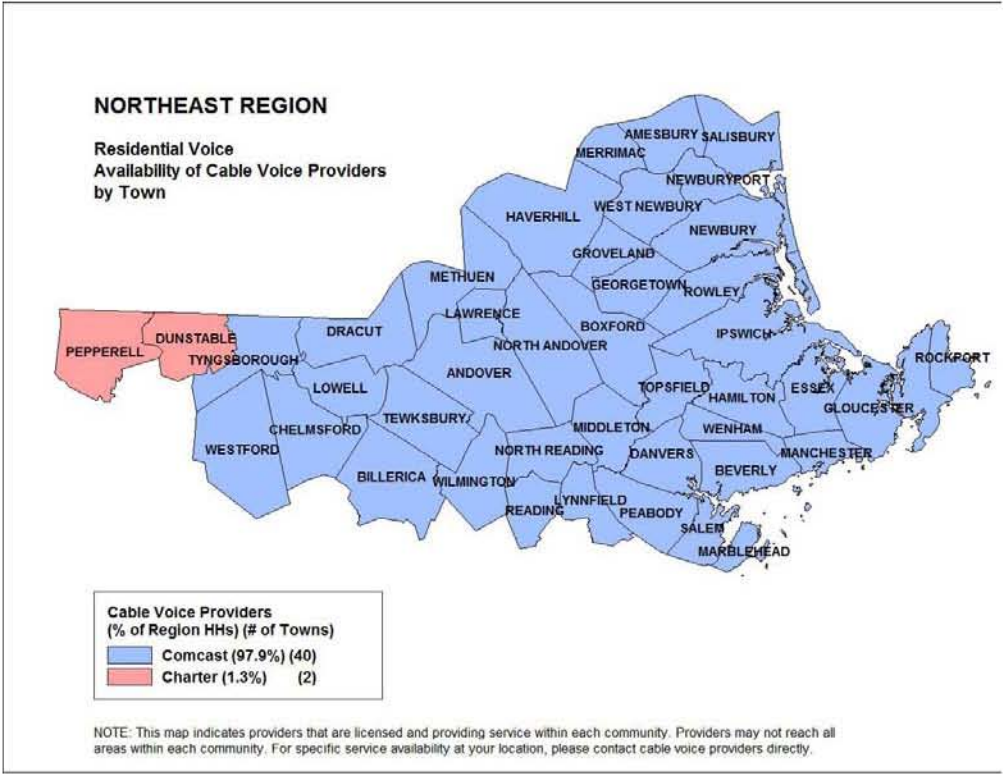
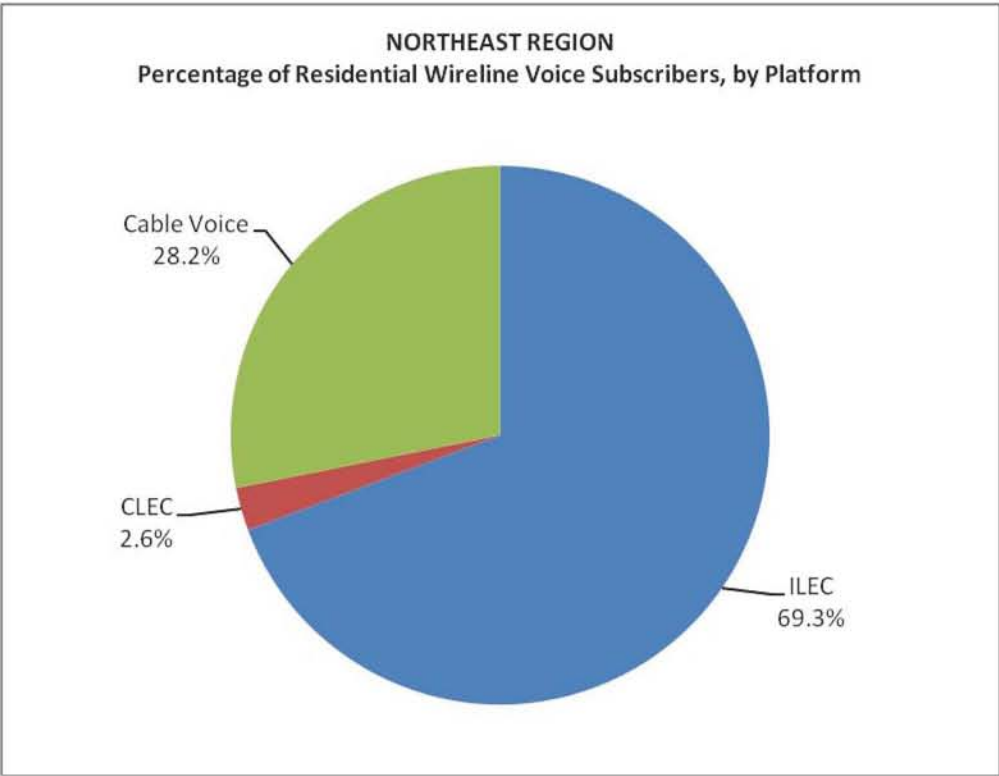


Figure NE-3: Market Shares for Residential Wireline Voice, by Platform, December 2007



II. Cable Video

Figure NE-4: Incumbent Cable Video Service Providers

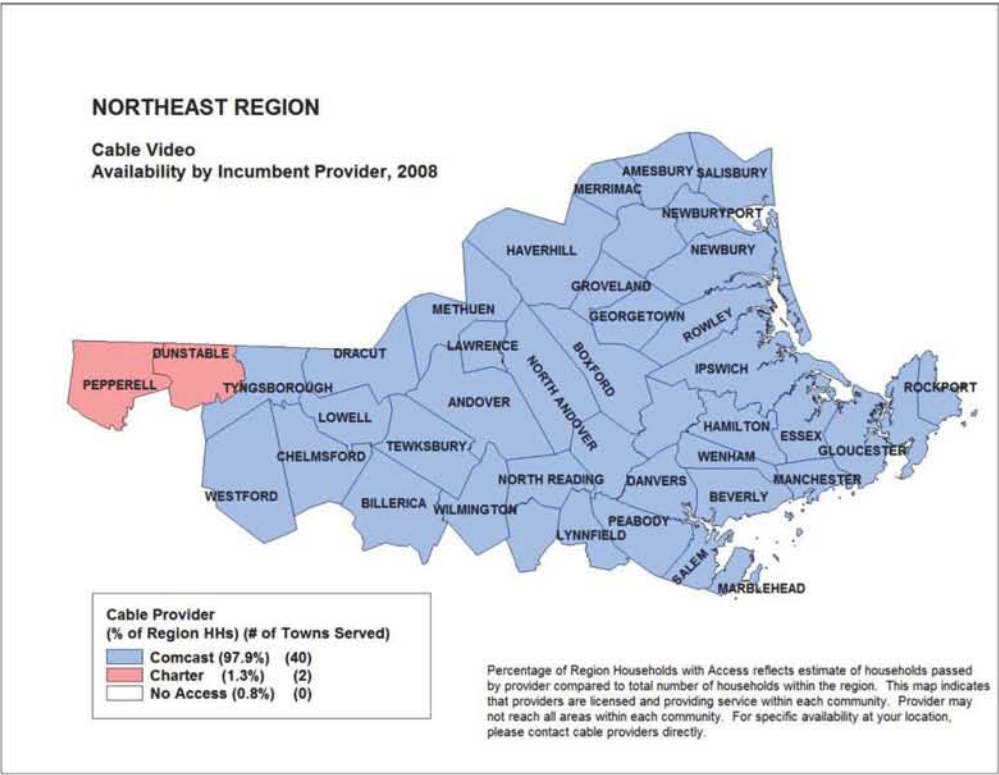


Figure NE-5: Percentage of Households Passed by the Incumbent Cable Provider, 2008

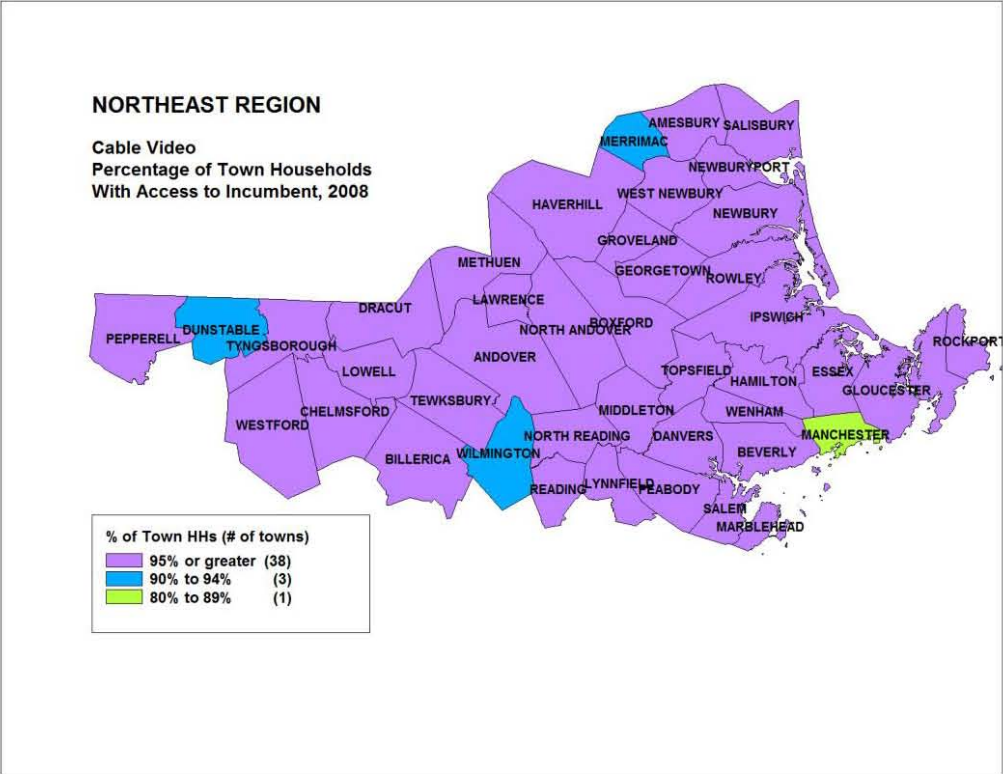
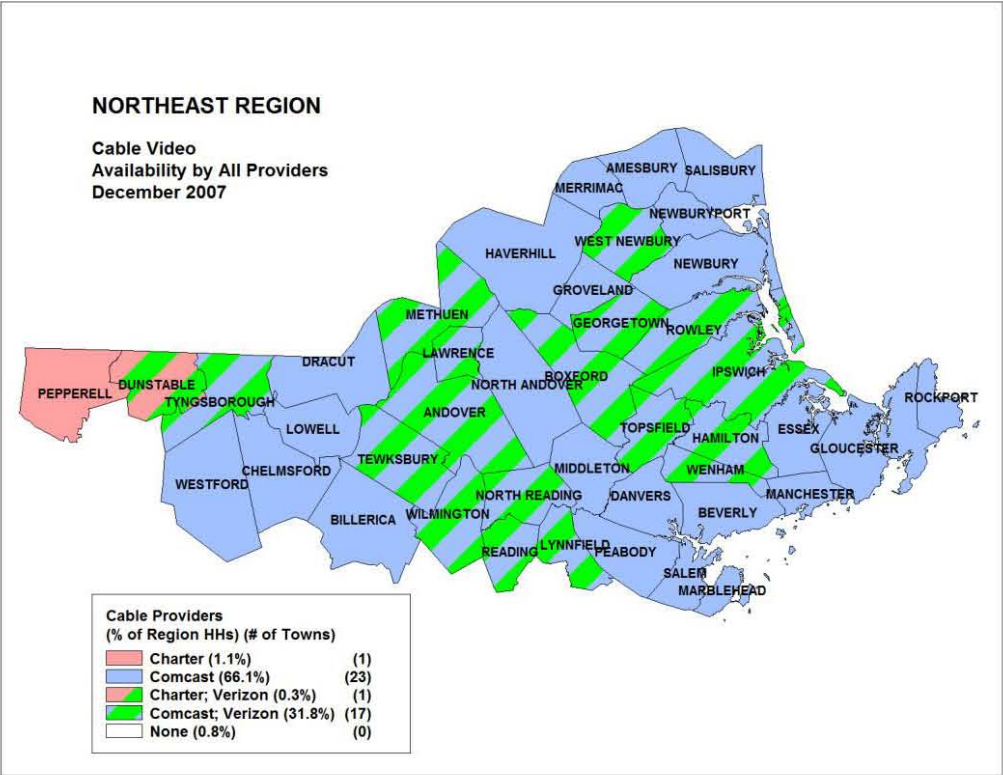


Figure NE-6: Active Cable Video Service Providers, December 2007



Southeast Region

I. Residential Voice

Figure SE-1: Availability of ILEC Voice Providers, by Town

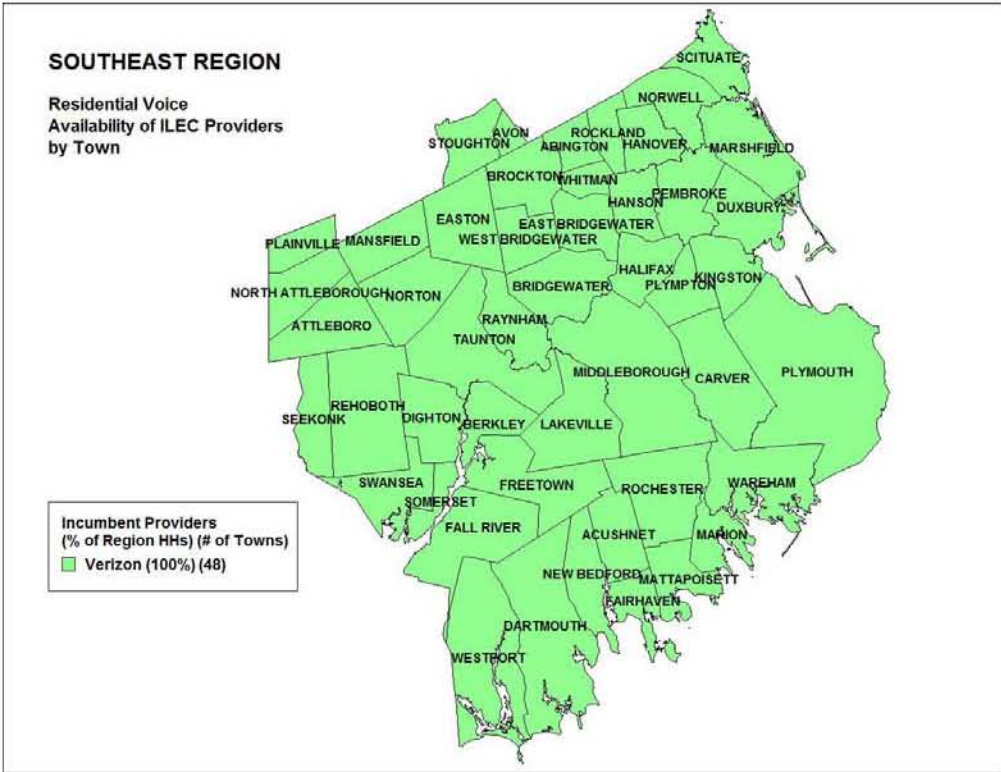


Figure SE-2: Availability of Cable Voice Providers, by Town, December 2008

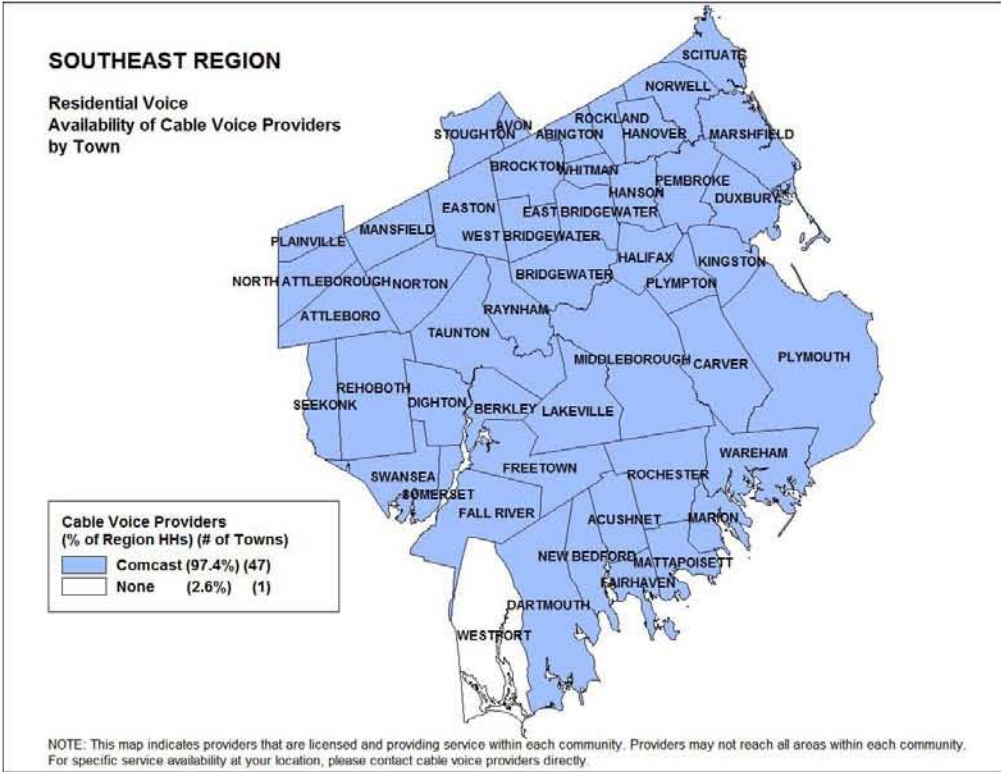
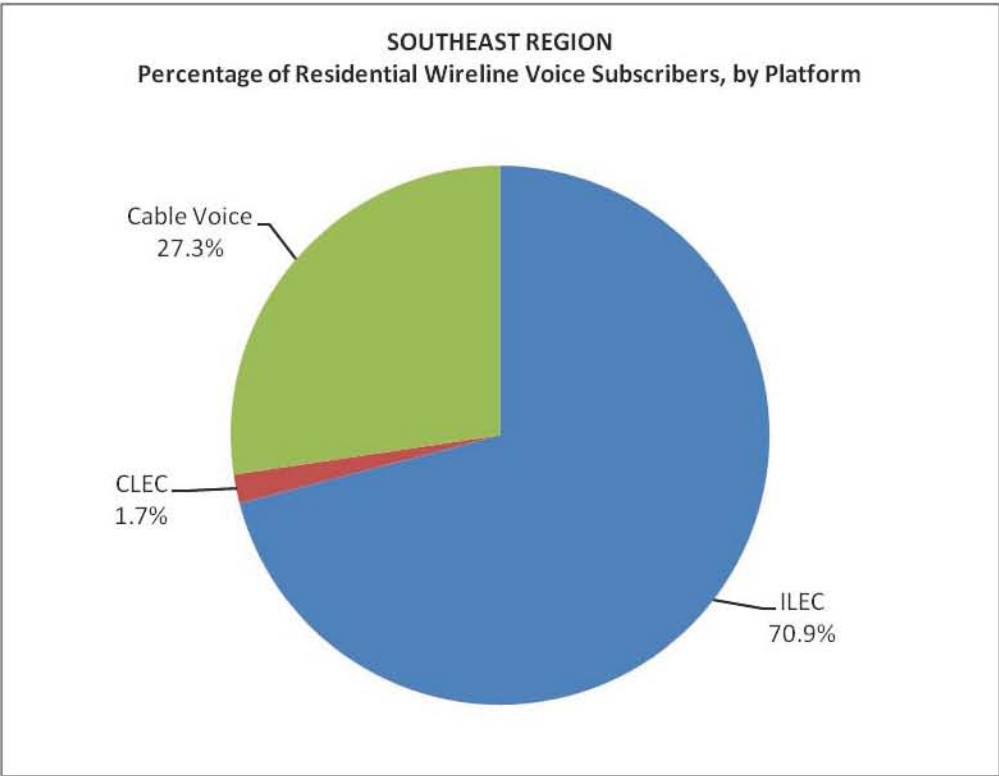


Figure SE-3: Market Shares for Residential Wireline Voice, by Platform, December 2007



II. Cable Video

Figure SE-4: Incumbent Cable Video Service Providers

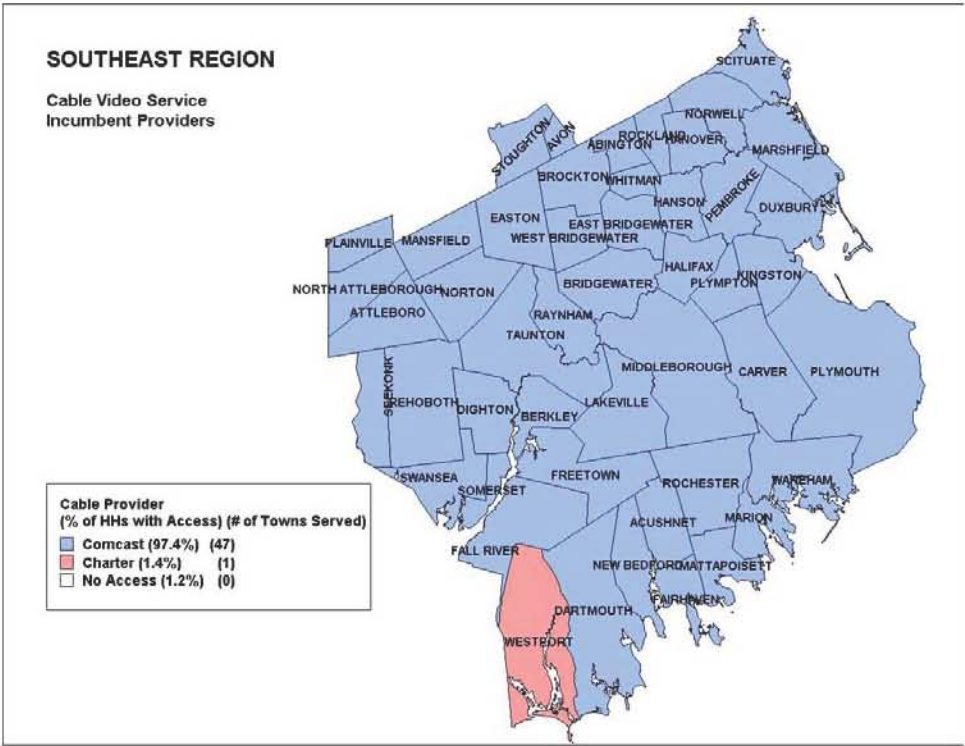


Figure SE-5: Percentage of Households Passed by the Incumbent Cable Provider, 2008

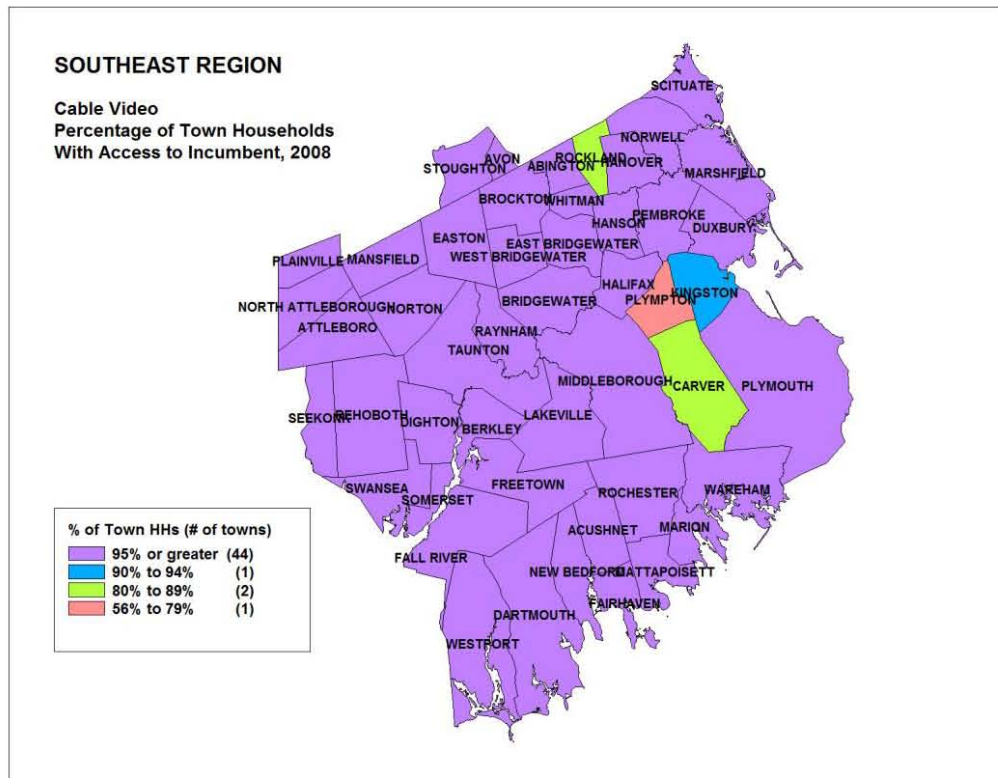
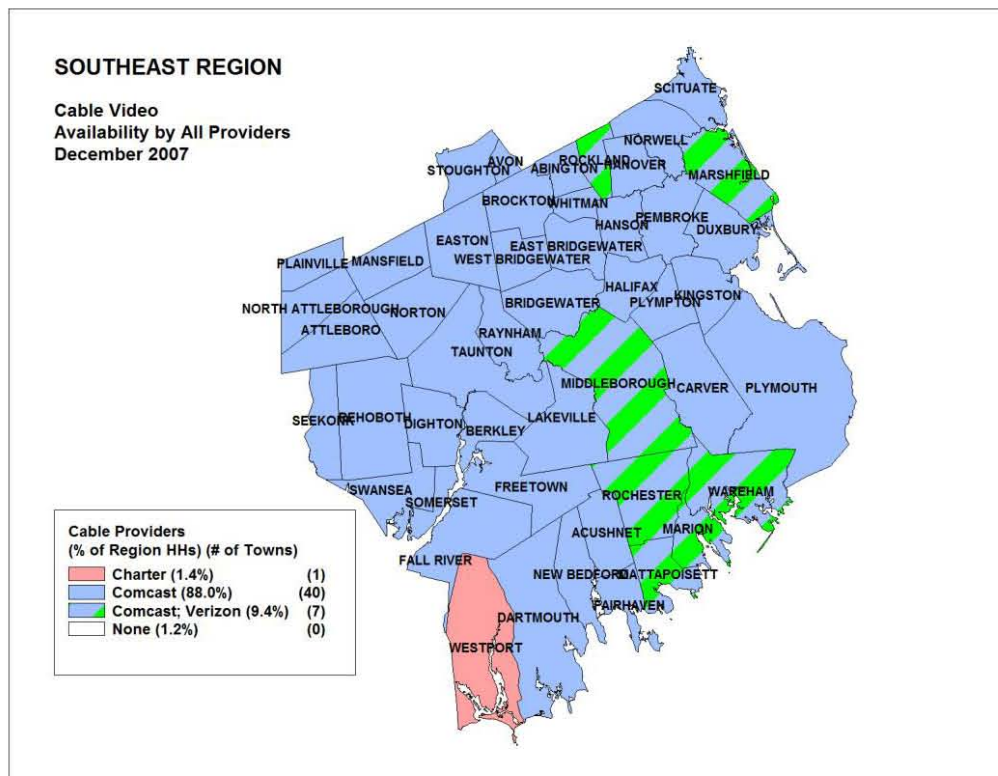


Figure SE-6: Active Cable Video Service Providers, December 2007



Methodology

1. Residential Wireline Voice Service

1.1 Availability

ILEC covered: **Method:** As a "Provider of Last Resort," ILEC is obligated to offer service to every household within the ILEC territory. Estimating number of households with access to Verizon's and Independent ILECs' services, by overlaying Massachusetts Geographic Information Systems (MassGIS) LandUse to Housing Allocation Data with MassGIS Community Boundaries. **Sources:** (1) MassGIS LandUse to Housing Allocation Data (2000 US Census Bureau housing data allocated over 1999 Land Use ortho imagery); (2) MassGIS Community Boundaries Map. **Confidentiality of Data:** (1) None, MassGIS data is publicly available; (2) None, MassGIS data is publicly available.

Cable Voice Covered: **Method:** Overlay maps identifying location of cable plant with map identifying point-specific locations of residential structures to calculate number of homes passed by cable plant for cable video service, then subtracting the number of homes passed in those communities where the cable provider does not offer cable telephony. **Sources:** (1) Cable Strand maps provided by individual carriers (BELD, Charter, Comcast, Cox, Norwood, RCN, Shrewsbury, and Time Warner) as of Summer 2008; (2) MassGIS LandUse to Housing Allocation Data (2000 US Census Bureau housing data allocated over 1999 Land Use ortho imagery); (3) 2008 Cable Rate Cards to identify those communities where cable voice is a service offering. **Confidentiality of Data:** (1) None, cable plant maps for all cable companies are publicly available per statutory requirement as part of the cable licensing process. (2) None, MassGIS data is publicly available; (3) None, Cable Rate Cards are publicly available. **Potential Errors:** (1) When overlaying cable plant maps with Land Use maps, there is potential that not all cable strands are properly aligned to the corresponding streets, which in some areas may cause an overestimation of houses passed, and in other areas may cause an underestimation of households passed; (2) Land Use as of 1999, does not account for new housing growth since 1999;¹ (3) Estimates calculated availability if a housing structure is within 200 feet of the cable strand, actual obligation for cable provider to offer service is dictated according to requirements specified in each cable license, of which 200 feet from cable strand was determined to be representative.

1.2 Adoption

ILEC Adoption: **Method:** (a) Statewide subscriber data from FCC Form 477, including statewide split of residential and business subscribers; (b) regional allocation derived by (b1) allocating wire center distribution of access lines reported in Verizon Service Quality Index Report, then (b2) calculating number of Verizon statewide business lines per employee in Massachusetts; applying statewide coefficient to the number of employees in each region to determine number of business lines in each regions, and (b3) obtain estimate of residential lines within each region as a balancing item from subtracting regional business lines as calculated in b2 from total lines in Region as calculated in b1; (c) Regional employee data used in b2 is obtained from the total number of employees reported by the Massachusetts Executive Office of Labor and Workforce Development on 16 Workforce Investment Areas (WIA). WIA to region distribution is done using town level employee data for 24 Massachusetts towns. **Sources:** (1) FCC Form 477 December 2007; (2) Verizon Service Quality Index Report, December 2007; (3) Massachusetts Executive Office of Labor and Workforce Development, March 2008. **Confidentiality of Data:** (1) Only statewide platform (ILEC/CLEC) level data is publicly available from FCC Form 477; DTC entered non-disclosure agreement for company-specific zip code data as reported by carriers; (2) None, Verizon Service Quality Index Monthly Reports are publicly available; (3) None, Data from the Labor and Workforce Development Office are publicly available. **Potential Errors:** (a) For purposes of reporting information for Form 477, there is a potential that carriers are not calculating subscriber counts in uniform fashion; for example, some carriers may be reporting the number of voice-grade equivalent lines provided while others are reporting the number of unique addresses served. The FCC has attempted to clarify its instructions for calculating subscriber counts beginning with the June 2008 reporting period; (b) regional estimates of Verizon's business lines as described in b2 may not be accurate as the coefficient of the number of employees per Verizon's business line may not be uniform throughout the regions.

¹ This note is true for all the methods where this datasource has been used.

Cable Voice Adoption: **Method:** Statewide subscriber data obtained from E911 filings; to determine regional allocation of cable telephony adoption, we applied the allocation factor for each cable company's region specific distribution of cable video adoption, adjusting for those communities without cable telephony. For residential and business breakdown of cable voice subscribers the Staff used the statewide percent of residential cable voice subscribers from FCC form 477 as of December 2007. **Sources:** (1) SETB E911 database, 2007; (2) Annual Cable Franchise Fee Filing, 2007; (3) FCC Form 477 December 2007; **Confidentiality of Data:** (1) Company specific data reported to E911 database is proprietary; (2) None, Annual Cable Franchise Fee filings are publicly available; (3) Only statewide platform (ILEC/CLEC) level data is publicly available from FCC Form 477; DTC entered non-disclosure agreement for company-specific zip code data as reported by carriers. **Potential Errors:** (a) Regional allocation of cable voice subscribers assumes uniform timing for availability of cable voice offering throughout Massachusetts and also assumes adoption rate for cable voice correlates with adoption rate of cable video. (b) According to the current FCC form 477 instructions, not all cable companies provide their cable voice "IP" customer counts. Applying the percent of residential cable voice subscribers from the FCC Form 477 to E911 data might not be an accurate measure of residential and business cable voice subscribers in Massachusetts.

2. Video Services

2.1 Availability

Primary Housing Units: **Source:** 2000 US Census. **Confidentiality of Data:** None.

Primary Housing Units in Municipalities with Overbuilder. **Method:** Identify Municipalities in Regions with Overbuilder Presence (70 municipalities statewide by year end 2007) and add Total Number of Primary Housing Units within each of these municipalities. **Source:** 2000 US Census. **Confidentiality of Data:** None.

Primary plus Secondary Total Households: **Method:** Combine total number of housing units from US Census with the UMass Donahue Institute estimate of seasonal housing units for each county in Massachusetts derived from the 2000 US Census. **Sources:** (1) 2000 US Census; (2) "Housing Units by Tenure and Vacancy Status", UMass Donahue Institute estimates derived from 2000 US Census. **Confidentiality of Data:** None. **Potential Errors:** The seasonal housing units have not been adjusted to accommodate for any differences between County and Region boundaries. Particularly for Boston Metro, Northeast, and Southeast Regions, the number of secondary housing units presented has not been properly allocated to account for those Counties that fall within 2 or more Regions, staff has not estimated direction of error for each Region.

Incumbent Covered: **Method:** Overlay maps identifying location of cable plant with map identifying point-specific locations of residential structures to calculate number of homes passed by cable plant for cable video service. **Sources:** (1) Cable Strand maps provided by individual carriers (Charter, Comcast, Cox, Shrewsbury, and Time Warner) as of Summer 2008; (2) MassGIS LandUse to Housing Allocation Data (2000 US Census Bureau housing data allocated over 1999 Land Use ortho imagery). **Confidentiality of Data:** (1) None, cable plant maps for all cable companies are publically available per statutory requirement as part of the cable licensing process. (2) None, MassGIS data is publically available. **Potential Errors:** (1) When overlaying cable plant maps with Land Use maps, there is potential that not all cable strands are properly aligned to the corresponding streets, however there is no reason to think that error is systematic in one direction; (2) Land Use as of 1999, does not account for new housing growth since 1999; (3) Estimates calculated availability if a housing structure is within 200 feet of the cable strand, actual obligation for cable provider to offer service is dictated according to requirements specified in each cable license.

Incumbent Covered Percentage: **Method:** Number of Housing Units Covered by Incumbent providers per Primary Housing Units in Region.

Overbuilder Covered: **Note:** *Overbuilder Availability presented here is estimation based upon Incumbent availability information, not data provided by Overbuilders.* **Method:** (1) for each Region, identify only those 70 municipalities where Overbuilder service from either BELD, Norwood, RCN, and/or Verizon FiOS was available as of December 2007; (2) For the 70 Overbuilder municipalities, overlay maps identifying location of Incumbent-provider cable plant with map identifying point-specific locations of residential structures to calculate number of homes passed by cable plant for cable

video service. **Sources:** (1) Cable Strand maps provided by individual carriers (Charter, Comcast, Cox, Shrewsbury, and Time Warner) as of Summer 2008; (2) MassGIS LandUse to Housing Allocation Data (2000 US Census Bureau housing data allocated over 1999 Land Use ortho imagery); **Confidentiality of Data:** (1) None, cable plant maps utilized for these estimates are publically available per statutory requirement as part of the cable licensing process. Verizon is currently only licensed cable provider in Massachusetts that has not submitted cable plant maps per statutory requirement for those municipalities where the company is licensed as a cable provider to offer FiOS video service. To date, the Department has not investigated Verizon's contention that the company is not under an obligation to submit cable plant maps. (2) None, MassGIS data is publically available. **Potential Errors:** (1) When overlaying cable plant maps with Land Use maps, there is potential that not all cable strands are properly aligned to the corresponding streets, however there is no reason to think that error is systematic in one direction; (2) Land Use as of 1999, does not account for new housing growth since 1999; (3) Estimates calculated availability if a housing structure is within 200 feet of the cable strand, actual obligation for cable provider to offer service is dictated according to requirements specified in each cable license.

Overbuilder Covered Percentage: **Method:** Estimate of Overbuilder Housing Units Covered per Total Number of Primary Housing Units within municipalities with access Overbuilder service. **Note:** This applies only in Boston Metro, Northeast, and Southeast Regions.

2.2 Adoption

Incumbent Adoption: **Method:** **Sources:** (1) Annual Cable Franchise Fee Filing, 2007. **Confidentiality of Data:** (1) None, Annual Cable Franchise Fee filings are publically available.

Incumbent Adoption Percentage: **Method:** Number of Incumbent Service Subscribers per Total Primary Housing Units covered by Incumbent Providers. Overbuilder Adoption: **Method:** **Sources:** (1) Annual Cable Franchise Fee filing, 2007. **Confidentiality of Data:** (1) None, Annual Cable Franchise Fee filings are publically available.

Overbuilder Adoption Percentage: **Method:** Number of Overbuilder Service Subscribers per estimate of Total Primary Housing Units covered by Overbuilders.